



## **IMPACT OF POWER OUTAGE ON VACCINE STORAGE**

On Thursday, August 14, 2003, the Eastern US power grid experienced an outage that affected a number of states and metropolitan areas in the northeastern and Midwestern United States. This outage has significant implications for vaccine storage. The following should provide some guidance regarding vaccine storage issues.

Do not open freezers and refrigerators until power is restored.

Most refrigerated vaccines are relatively stable at room temperature for limited periods of time. The vaccines of most concern are MMR and Varivax, which are sensitive to elevated temperatures. MMR may retain potency at room temperature, depending on the duration of exposure. With regard to Varivax, CDC will be consulting with Merck Vaccines to determine the best course of action.

Monitor temperatures; don't discard; don't administer affected vaccines until you have discussed with public health authorities.

If the power outage is on-going:

1. Keep all refrigerators and freezers closed. This will help to conserve the cold mass of the vaccines.
2. Continue to monitor temperatures if possible. Do not open units to check temperatures during the power outage. Instead, record the temperature as soon as possible after the power is restored, and the duration of the outage. This will provide data on the maximum temperature and maximum duration of exposures to elevated temperatures.
3. If alternative storage with reliable power sources are available (i.e. hospital with generator power), transfer to that facility can be considered. If transporting vaccine, measure the temperature of the refrigerator(s) and freeze(s) when the vaccines are removed. If possible transport the vaccine following proper cold chain procedures for storage and handling or try to record the temperature the vaccine is exposed to during transport.

When power has been restored:

1. Record the temperature in the unit as soon as possible after power has been restored. Continue to monitor the temperatures until they reach the normal 2 – 8 degrees Celsius range in the refrigerator, or -15 degrees C or less in the freezer. Be

sure to record the duration of increased temperature exposure and the maximum temperature observed.

2. If you receive vaccine from your state or local health department, they may be contacting you with guidance on collecting information on vaccine exposed to extreme temperatures.
3. If you are concerned about the exposure or efficacy of any of your vaccine stock, do not administer the vaccine until you have consulted your state or local health department.
4. Keep exposed vaccine separated from any new product you receive and continue to store at the proper temperature if possible.
5. Do not discard any exposed vaccine. Any vaccine determined not to be viable may be returned to your vaccine supplier. Your state or local health department will work with you on all vaccine they supply to you.

For additional information and guidance please contact your state or local health department.